

## BULLETIN

The energy and planning resource for Western utilities

## NEW MARKETING ASSISTANT LEARNS UTILITY ROPES AT GCEA

A utility energy-efficiency program can only help customers save money and help control operation costs if customers participate. Getting the word out is a perpetual struggle for many power providers, and one that is even harder for small rural cooperatives. Gunnison County Electric Association (GCEA) in Colorado is meeting that challenge with new blood and a fresh perspective—and a crash course in energy-efficiency programming.

Logann Peterson, who graduated last year from Western State Colorado University with a degree in strategic communication, recently made the leap from marketing intern to marketing and communications assistant. In her new career as a utility professional, Peterson faces the double challenge of engaging younger customers while learning about her new field. “I didn’t really know anything about the utility business when I accepted the internship,” she admitted. “Working at GCEA has been an eye-opening experience. A cooperative is more like a big family than a corporation.”

## LOTS TO LEARN

The opportunities available at a utility also surprised Peterson. “Alantha’s job is a whole new concept for me,” she added.

“Alantha” is GCEA Energy Use Specialist Alantha Garrison, who administers GCEA’s customer energy-efficiency programs. Part of Peterson’s internship included helping to market rebates on LED lighting and Energy Star appliances, and free energy audits for residential and commercial members. GCEA also offers rebates for electric thermal storage heaters and ground-source heat pumps, as well as discounts to members on Convectair room heaters.

To get up to speed on the topic of energy efficiency, Peterson immersed herself in literature Garrison recommended and did plenty of research on her own. She also accompanied Garrison on an energy audit. “I didn’t know there was so much equipment involved, like blower doors and infrared cameras,” she said. “It was fascinating to see how the tools show what is going on in a building.”

Peterson assists with production of the newsletters, bill inserts, web content and radio ads, while Garrison provides technical expertise and direction for stories on energy-saving measures and related co-op programs. “We don’t expect Logann to learn all the details about our incentives and energy-efficiency programs, but she is very interested in learning about the technologies,” Garrison noted. “She went to the DOE site to research LED lights for an article on lighting.”

GCEA has relied on the traditional



GCEA Marketing and Communications Assistant Logann Peterson received a degree in strategic marketing from Western State Colorado University in Gunnison, Colorado. (Photo by Gunnison County Electric Association)

formats to promote its programs, and having someone trained in marketing to polish the material has been helpful, Garrison observed. However, “Those avenues are not really building the customer participation we have hoped for,” she said.

## UPDATING STRATEGY

Garrison’s goals for the coming year include improving member feedback and increasing outreach to younger members. That dovetails nicely with Peterson’s first-year goal of establishing a social media presence for GCEA. “Social media is the number-one way businesses communicate with customers today,” Peterson pointed out. “Up to now, the co-op’s online profile has been very low.”

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## Learning ropes at GCEA from page 1

GCEA recently gave its website a makeover and launched a Facebook page and Twitter account, which Peterson will maintain. In addition to announcing outages, Garrison hopes Facebook and Twitter can be used to share energy-efficiency tips, get the word out about energy audits promote co-op events.

Peterson has her work cut out for her, attracting visitors to GCEA's social media sites and establishing metrics for that outreach effort. "Right now, most of our 'likes' are from GCEA employees," she admitted.

### TALE OF TWO DEMOGRAPHICS

Part of the challenge in marketing GCEA programs is finding ways to reach two distinct groups of members.

Unlike many rural areas, Gunnison attracts young people because of the college, many of whom stay after graduation to enjoy the Western Slope lifestyle. Those residents are more likely to pay attention to social media, but less likely to own their homes. "Most students are renters, and it is tough to motivate them to change their energy use habits," Peterson observed.

Outside of town is a decidedly older, more settled demographic of ranchers



During an energy audit, Energy Use Specialist Alantha Garrison explains to a GCEA member about air leakage around windows. (Photo by Gunnison County Electric Association)

and farmers, which is changing too, but more slowly. "I'd classify them as the 'over 30' crowd," said Peterson. "The internet doesn't reach into some of the more remote corners of our service area, either, so we still have to communicate with those members in the 'old-fashioned' way," she added.

### LOW-TECH BRIDGE-BUILDING

Partnering with organizations in the community is another old-fashioned way to engage members, and one that is proving effective for GCEA. A fellowship student for a master's program at Western State has set up a few member events and is working with the local housing authority to promote weatherization. "He going door to door to identify members who are income-qualified for the program and telling homeowners what is available to them," Garrison said. "The personal touch may be low-tech but it works—our goal is to upgrade 12 homes this year and we are on track to meet it."

Garrison and other GCEA employees have also taught a class on utility business and science at the university. The class not only educates younger and future members about energy use, it serves to position GCEA staff as experts on the topic, another marketing goal.

### FORWARD TO THE FUTURE

Times are changing for utilities—even in rural areas like Gunnison and power providers have to keep up. Fortunately, GCEA is preparing for the future by investing in young employees who are up to the challenge.

Crafting a modern marketing strategy to reach members with the programs that will keep the lights on and the economy strong is going to take a certain amount of trial and error, as Garrison and Peterson readily acknowledge. *Energy Services Bulletin* wishes Logann Peterson good luck in her new job. We look forward to covering GCEA's marketing and energy-efficiency successes as they work out the formula. ⚡

## ENERGY SERVICES BULLETIN

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**ENERGY  
SERVICES**  
Western Area Power Administration

# CONGRATULATIONS TO RIVERSIDE, CALIFORNIA'S 'COOLEST CITY'

**E**nergy Upgrade California, the California Air Resources Board (CARB) and the University of California's Renewable and Appropriate Energy Laboratory named Western customer the city of Riverside the winner of the CoolCalifornia City Challenge. The competition between 10 California cities to reduce their carbon footprint and better manage energy use began April 1. The cities earned points by individual households, small businesses and teams in the community by tracking their energy use and vehicle emissions.

The California Air Resources Board recognized the cities at its Oct. 23 meeting. Riverside competed alongside Arcata, Burlingame, Claremont, Corona, Chula Vista, Long Beach, Lynwood, Mission Viejo and Rancho Cucamonga. Claremont and Rancho Cucamonga, respectively, claimed the honor of second and third "Cool California Cities" in a hard-fought battle.

All participating cities will receive a portion of \$100,000 prize based on their total points, with Riverside receiving the largest amount—\$32,950. The prize money will go toward city programs that help the environment.

## GETTING RESIDENTS INVOLVED

The challenge cities engaged nearly 4,000 households and civic groups in total to take simple, everyday actions to reduce their carbon footprint. Participants logged their monthly energy data and motor vehicle miles onto a website that determines how much carbon is being cut and calculates how many points those actions generated for each household and municipality.

More than 1,100 Riverside residents tracked their energy savings online and helped the city win the contest. Participants installed energy-efficient



Pictured from L to R: ARB Board Member Barbara Riordan, Riverside Mayor Rusty Bailey, ARB Board Member Judy Mitchell, & ARB Chairman Mary D. Nichols. (Photo by California Air Resources Board)

light bulbs, took to bicycles and walking and learned to think twice about turning appliances on. With fewer than half as many residents taking the challenge, Claremont came within 200,000 points of matching Riverside's score of 3.5 million. Some steps contestants took, such as investing in rooftop solar or purchasing electric vehicles, will provide carbon reductions and additional savings for many years.

## MORE THAN A GAME

Not only did the challenge save residents energy and money, it also demonstrated that cities play an important role in the state's efforts to fight climate change and move toward a cleaner, more sustainable economy. Now in its second year, the competition had 40 percent more households and 60 percent more greenhouse gas reductions in half the time. Altogether, participants saved more than 800,000 pounds of carbon dioxide,

equivalent to removing more than 140 California homes from the grid or 80 automobiles from the road for a year.

Cash prizes for civic improvements, bragging rights and recognition are not the only reasons the cities took the challenge. CARB and its program partners also gained valuable information about how to motivate individuals to take voluntary steps to curb their carbon footprints. Voluntary actions are part of California's ambitious climate plan, and CARB is developing tools and resources to support these non-regulatory efforts.

Participating cities realize that the challenge of energy management is not a one-time event. Managing energy efficiently, saving money and making homes and businesses more comfortable is a way of life. In taking the challenge, all of California's "Cool Cities" are learning best practices to make their communities healthier and more sustainable, and that makes all of them winners. ⚡



# PLANNING AT HEART OF ENERGY SERVICES

**T**he utility business may seem dry and matter-of-fact to consumers, but those in the business know it is a rollercoaster ride. To keep the lights on and the electricity affordable, power providers must balance a host of competing demands: renewable portfolio standards, carbon regulations, state mandates, federal mandates, customer desires, environmental concerns, new technology, aging infrastructure. The only way to keep all the plates spinning is to think ahead, and that is where Energy Services comes in.

Energy Services exists to facilitate the resource planning that Western's firm power contracts require. Firm power customers must complete a comprehensive integrated resource plan (IRP) every five years, along with annual updates. "That may sound like a lot of reports," acknowledged Energy Services Manager Ron Horstman, "but circumstances change so quickly in this industry, a business plan can easily be out of date in 12 months or less. It was true in 1992 when congress passed EPAct, and it is doubly so today."

## **MORE THAN GOOD IDEA, IT'S LAW**

EPAct, the Energy Policy Act of 1992, established the IRP requirement to ensure that Western firm power customers are using their federal hydropower allocations efficiently. Also, it encourages utilities to engage in long-term planning, a process that benefits any business, regardless of size, location, regulatory environment and a host of other influential factors. "Low-cost hydropower from federal dams is crucial to keeping the nation's electricity supply affordable, especially for small towns and rural communities," Horstman pointed out. "Our rivers are among the nation's greatest resources and they belong to the general public. Western has a responsibility to protect the health

# ENERGY SERVICES

## Western Area Power Administration

of those waterways and to make sure that the greatest possible number of public utilities have access to it."

In 1995, Western adopted the Energy Planning and Management Program (EPAMP) setting out the IRP requirements and launching the Power Marketing Initiative (PMI) for marketing long-term firm hydropower. The PMI provides resource pools of power that Western can allocate to new customers.

Not only does resource planning extend the availability of federal hydropower, it helps utilities provide the services their communities want and need to stay vibrant and thrive. But any process that accomplishes so much is bound to be complicated, especially for frequently understaffed small co-ops and municipalities. To provide Western customers with the technical assistance to facilitate effective planning, EPAMP commissioned Western's Energy Services Program.

## **IT'S COMPLICATED**

The IRP is as much an ongoing process as it is a plan, the point of which is to provide a utility's consumers with adequate and reliable service at the lowest cost to the system. The definition of the "lowest cost" has been changing as utilities realize that they must consider factors beyond the price tag of a kilowatt. Increasingly, consumers are calling on power providers to address environmental, political, social, economic and technical concerns in their plans as

well. These concerns carry their own indirect costs that a more sophisticated public expects the utility to acknowledge and mitigate.

Determining the optimum approach requires the utility to evaluate a range of different resources and strategies on both sides of the meter. The planning process might assess new generating capacity, power purchases, energy conservation and efficiency, co-generation and district heating and cooling applications and renewable energy resources, to name a few.

A certain amount of economic forecasting must be part of the process, too. A community can change a lot in five years, with the population growing or shrinking, businesses coming to the area or leaving and new energy-consuming technologies reaching the mainstream.

Ideally, the utility will reach out to its consumers throughout the planning process to discuss their expectations and share upcoming challenges. This "public participation process" is critical to crafting comprehensive solutions and getting buy-in from consumers on implementing the plan.

## **AN ASSISTANCE BUFFET**

Since rolling all these considerations into one plan is about as easy as it sounds, our customers need all the information Energy Services can provide and that turns out to be a lot.

*See PLANNING AT THE HEART OF ENERGY SERVICES, page 5*

- **Knowledgeable staff**—Our technical assistance menu begins with our people. Customers with questions about their IRPs can contact Horstman or their regional representative.
- **Robust website**—The Energy Services website is the next stop in the search for guidance, inspiration and industry news. On the home page, visitors will find links to calculators for estimating energy use by air conditioning and heating systems, pool pumps and irrigation equipment. These calculators can help utility program managers make the case to consumers for equipment upgrades, or estimate potential savings from incentive programs. An interactive calendar on the home page displays upcoming workshops, conferences, webinars and other training opportunities focused on energy use.
- **Technical services**—Washington State University Energy Extension, which created the calculators and the calendar, provides other technical services to aid with planning. Western customers can ask questions about specific technologies or programs to the Energy Experts hotline by calling 800-769-3756, or submitting their question online. Visitors might research successful energy management programs using the Energy Solutions database, or the Utility Options database. Users can also submit their own examples of innovative programs to Utility Options.

- **Equipment Loan Program**—Western customers who need special equipment to implement a program can borrow it free of charge from the Equipment Loan Program. An equipment loan is a good way to test drive a tool before you buy it or to get the use of an expensive piece of equipment that is not in your utility's budget this year. Borrow infrared cameras, power meters and more to perform audits on consumer homes and businesses or maintenance on your own system. Bring educational kits and diagnostic tools to customer meetings and schools. A quick visit to the extensive library of training resources will get you up to speed on how to use the tool.

### **LIBRARY ON YOUR DESKTOP**

Effective planning requires utilities to stay on top of best practices, new technologies and the changing political scene. The Energy Services Bulletin features stories on the latest industry news about reports, policies, education opportunities and—most important—our customers. Western customers are the mother lode of ideas for load management strategies and portfolio diversification.

The blog just scratches the surface, however. Energy Services also publishes guides, fact sheets and collateral material on topics related to energy efficiency. Better yet, we can customize those publications with utility logos so our customers can use them in their consumer education programs.

"Resources," as the name implies, connects utilities with other agencies that can help them shape their own

future. Visitors will find lists of carefully curated links to organizations specializing in energy and water conservation, renewable energy, project funding and incentive programs to name a few.

### **PUTTING IT IN WRITING**

Armed with proven programs, a clear picture of the road ahead and a nimble strategy for navigating it, utilities must overcome one more obstacle in the planning process: Fear of Paperwork.

Yes, customers still have to produce a plan that checks off all the boxes in an arcane-seeming rule, but Energy Services has that covered too. The online IRP Compliance Training walks customers through the process step by step, with clear explanations of what they need to put into their reports. A quick refresher course in the form of IRP and alternative plan checklists comes in handy for seasoned planning pros in charge of annual updates.

More lessons from the trenches can be found in actual customer IRPs, available online. These examples offer a great opportunity to find out what worked for other utilities in your area and how they presented their plan.

There is no replacement for being prepared when you face a long journey down a twisting road of shifting priorities, disruptive and new technologies and unanticipated challenges. Each Western customer must chart its own course, but Western Energy Services is here to point the direction toward the final destination of reliable, affordable and sustainable power. ⚡

# ENERGY STAR LISTS TOP 5 REASONS TO GIVE ENERGY-EFFICIENT GIFTS

**T**he holiday shopping season is about to shift into high gear, and new electronics will undoubtedly appear on many wish lists. Unfortunately, those gifts can come with a hidden price tag—higher utility bills in the New Year. Help your customers add energy efficiency to their shopping carts with these five suggestions from ENERGY STAR.

## 1. TVs offer the hottest features—

You don't have to sacrifice those sought-after bells and whistles like smart TV functionality, ultra-high definition, large screens, LED backlighting to keep your electricity bill down. ENERGY STAR-certified TVs offer all the latest features, as well as being more than 25 percent more energy-efficient than standard models.

## 2. Sound bars sound even

**better**—Sound bars, wireless speakers and gadgets with Bluetooth connectivity are among the most popular new products, and some of the latest to earn the ENERGY STAR. You can make the audiophile on your list happy with gifts that are up to 60 percent more efficient.

**3. Give the “bright” gift**—ENERGY STAR-certified LED, or light-emitting diode, bulbs make great gifts and stocking stuffers. Lighting technology is changing so quickly that it can be hard to keep track of the latest developments. Choosing the ENERGY STAR label is an easy way to make sure you get the energy efficiency and performance you expect. LED bulbs that earn the label are independently certified to ensure they deliver on brightness and color, and shine light where you want it.

**4. 'Tis the season to be streaming**—Tell your loved ones who like to stream movies and videos that laptops and tablets use the least amount of energy. Or better yet, give them an ENERGY STAR-certified slate or tablet. These personal devices use 10 times less power to stream than a game



console does, seven times less power than streaming directly to a television and six times less than streaming to a desktop computer and monitor.

**5. The environment is on everyone's wish list**—Shopping for electronics can be overwhelming, but the little blue label makes the choice easier. ENERGY STAR products are designed and certified to save energy, a gift that keeps on giving long after the decorations are packed away and the last sugar cookie is eaten. It is the thought that counts and ENERGY STAR gifts show that you are thinking about innovative technology today and a cleaner environment tomorrow.

And although we would never recommend giving large home appliances as Christmas gifts, January and February are big months for those kinds of purchases.

Use holiday bill inserts to remind your customers of the benefits of ENERGY STAR appliances and any customer rebates your utility offers.

Happy holidays from Western and ENERGY STAR. ⚡





## AROUND THE WEB

### NRECA UNVEILS INTERACTIVE WEBSITE TRACKING COOPERATIVE SOLAR DEVELOPMENT

**T**he National Rural Electric Cooperative Association (NRECA) has unveiled an interactive website tracking solar development by electric cooperatives. Offering maps, data, photos and video, the website provides an overview and new details about the recent dramatic increase in cooperative-owned and purchased solar capacity.

Member-owned, not for profit co-ops either have online or are planning to develop 240 megawatts of owned and purchased solar capacity in 34 states. According to NRECA, this development is distinguished by its large footprint, rapid growth and potential for expansion.

"Co-op solar is consumer-owned

solar," said NRECA CEO Jo Ann Emerson. "The solar website shows how the consumer-owned utility business model can spur innovation and expand solar capacity in regions where this resource had previously been written off as too expensive or not viable."

Highlights of the new website include maps showing the co-op solar footprint, solar projects developed abroad by NRECA International and median income levels and co-op solar development. Visitors will also find a chart showing the cumulative growth of co-op solar capacity, and videos, pictures and stories of significant co-op solar projects throughout the nation.

The website complements NRECA research, funded by the Department of Energy's SunShot initiative, to develop

tools and business strategies to accelerate the deployment of utility-scale solar.

Co-ops are making significant investments in renewable resource generation, using loans from the Rural Utilities Service and other sources. With solar becoming more cost-competitive, electric co-ops are poised to invest hundreds of millions of dollars in new projects. In addition, co-ops purchase renewable energy from large projects such as the 31 MW Cimarron Solar Facility in New Mexico and the 7.7 MW Azalea Solar Power Facility in Georgia. ⚡

*Source: National Rural Electric Cooperative Association via Renewables Biz, 11/8/14*

### 16TH PLMA SPRING CONFERENCE "CALL FOR PRESENTERS" NOW UNDERWAY

**T**he Peak Load Management Alliance (PLMA) is seeking session presentation proposals through Friday, Dec. 12, for the 16th PLMA Spring Conference taking place April 28-29, 2015, in Tucson, Arizona. The program planning committee is searching for exceptional perspectives exploring best practices and cutting-edge issues that affect professionals who develop, implement and evaluate demand response programs.

It is NOT complicated! Limit your session proposal to just one page and simply provide:

- Presentation title and one-paragraph description as it might appear on the agenda
- Presenter's name, title, organization with one-paragraph bio as it might appear on the agenda
- Brief explanation of why the session will be relevant and compelling to the audience

Need more reason to share? Selected presenters get a free conference registration!

If your presentation is chosen, don't forget to let us know at Energy Services Bulletin. We are always on the lookout for stories about our customers' successful and innovative load management strategies.

*Source: Peak Load Management Alliance, 11/21/14*



# DATA, COORDINATION NEEDED TO UNLOCK ENERGY SAVINGS IN WATER CONSERVATION

**T**he water-energy nexus has received more attention lately, especially from Western customers grappling with long-term drought in their service territory. We understand the connection between the two resources: Producing electricity requires water, and moving, treating and re-treating water requires energy. Undoubtedly, there are opportunities to create cross-cutting conservation strategies, but so far, utilities and policymakers have paid little attention.

Watts in a Drop of Water: Savings at the Water-Energy Nexus, a new paper from the American Council for an Energy Efficient Economy (ACEEE), seeks to quantify the water-energy nexus across a range of energy intensities for water and wastewater services. It also examines the potential avoided energy consumption from water efficiency programs and provides estimates of the possible energy savings.

One barrier to creating a program template or sharing best practices is that the range of water's energy intensity varies widely from system to system. This is largely due to differences in size of the water systems, pumping requirements between geographic locations and raw water characteristics. Drawing from existing data, the paper develops national estimates of energy savings associated with conserving water throughout the processes of conveyance, heating and water and sewage treatment. The data show a dramatic range of energy intensity, particularly in the water service sector (source, conveyance and treatment).

Another problem the paper identifies is that there is a lack of raw data on energy use by water and wastewater facilities across the country. Traditionally, energy and



water utilities have siloed priorities, focusing only on delivering their respective products.

However, with increased interest in using energy efficiency to meet greenhouse gas and other pollutant standards, utilities and air regulators should be looking for every opportunity to achieve greater savings. The authors found that some local and state jurisdictions are seeking better documentation of water-energy interactions to facilitate more

integrated program development and evaluation.

ACEEE concludes that there is a big opportunity for savings, but much more work needed to achieve them. Utilities and regulators need more data along, with solid methods to calculate energy savings from water conservation. If energy and water utilities are willing to collaborate on innovative projects, the benefits, particularly in states facing severe droughts, would be huge. ⚡